AN ASSESSMENT OF THE KEY DETERMINANTS OF BUILDING SCIENCE STUDENTS' SATISFACTION WHEN UNDERTAKING GROUP WORK: A CASE STUDY OF THE UNIVERSITY OF JOHANNESBURG, SOUTH AFRICA

Clinton Aigbavboa[1] and Wellington Thwala[2]
1&2Department of Construction Management & Quantity Surveying, University of Johannesburg, Doornfontein Campus, Johannesburg, 2028, South Africa

This study assesses university's students' views on team work. The specific research aim is to investigate the factors that affect students' satisfaction when undertaking group work. The data used in this paper were derived from both primary and secondary sources. The secondary data was collected via a detailed review of related literature. The primary data was collected through a structured questionnaire aimed at 55 BTech (undergraduate final year) students. Data received from the questionnaires was analysed using descriptive statistics procedures. Findings from the study revealed that the most important factors which affect students' satisfaction when undertaking group works are: students having the same attitude towards work; ground rules for the operation of the group; some students do not come to group meetings and not all students contribute to the group assignments. This study reveals the key determinants of students' satisfaction when undertaking group work, hence preparing the students to be team players before they enter the world of work.

Keywords: team work, group work, University of Johannesburg, student

INTRODUCTION

Working on a team is unavoidable in this present world, no matter your position-student, organizational communicator, movie actor, professor, amongst others (Johnson, 2011). This is because enterprises today are expecting employees to be able to work well both independently and collaboratively in order to maximise their potentials and foster creativity and development of one-another (Pang, 2011). Working in groups has become a fundamental part of education as a mechanism to help students learn through interaction with others as well as to become familiar to working in a group environment that imitates the work place (Freeman, 1996). Experiences from organisations using the team approach for improving performance have pointed to teamwork as an important tool in the work place. This perspective has pressed organizations to start looking for teamwork skills in their new employees (Ulloa and Adams, 2004). Although most employers provide on-the-job training, yet, they expect that their new employees at least possess the basic understanding of why teamwork skills are important to their career.

[1] aigclinton@gmail.com*
[2] didibhulut@uj.ac.za

Clinton Aigbavboa and Wellington Thwala (2013) An assessment of the key determinants of Building Science students' satisfaction when undertaking group work: a case study of the University of Johannesburg, South Africa *In:* Laryea, S. and Agyepong, S. (Eds) *Procs 5th West Africa Built Environment Research (WABER) Conference,* 12-14 August 2013, Accra, Ghana, 149-159.

Looking for ways of shortening the new employees learning experience on acquiring teamwork skills in the workplace, Ulloa and Adams (2004), Alexander and Stone (1997) stated that cooperations are suggesting institutions of higher education to prepare future employees (students) to be effective team players. Also, Thomas (2001) suggested that one way to prepare future employees for the work environment is by having them work in groups in academic settings. Based on this tenet, accreditation organizations at the academic level such as the South Africa Council for the Quantity Surveying Profession (SACQSP), The South African Council for Project and Construction Management Professions (SACPCMP) among others, are requiring higher education institutions in South Africa to introduce teamwork activities into their courses. In response to this demand, institutions of higher education are developing approaches for introducing teamwork in their classrooms. Higher institution are thus enhancing the process of learning through the use of teams knowing that in corporate environments teamwork is a key element to improving employee performance and learning (Cohen and Bailey, 1997; Devine et al., 1999).

The general acceptance of team structures in the construction industry environment together with the common practice of including group projects/assignments in university curricula means that undergraduate building science students who are being prepared for the construction industry are rightly directed towards maximizing their potentials by working in groups. Although group work is sometimes hailed as an educational panacea, however, the realities are considerably more complex. Therefore, identifying the appropriate team factors and their relationship with the students' satisfaction is essential for higher education to know the areas to concentrate on when teaching students to work in groups.

Undergraduate (Final year) building science students majoring in Construction Management or Quantity Surveying at the Department of Construction Management and Quantity Surveying at the University of Johannesburg, are required to work in groups throughout their study time. The main educational reasoning behind requiring the students to work in groups as an integral part of their study time is that the experience of group work is a good preparation for working in teams and managing work teams in the future as construction professionals. Little research has been conducted which directly examine the determinant factors of satisfaction when students undertake group work during the course of their study. Hence, this research will assesses university's (building science) students' views on team work. The specific research aim is to investigate the factors that affect students' satisfaction when undertaking group work. The research begins by looking at the concept of student group work in educational setting in some aspects; this will be followed by the explanation of the methodology adopted for the study. Thereafter, the findings for the study will be presented, followed by the conclusion, before drawings some recommendations for the study.

Student group work in educational settings

Research in educational settings shows that most students recognize the necessity of working in groups such as improving interpersonal skills, but they still prefer individual work when the goal is achieving good performance (McCorkle et al., 1999).

In our modern society, groups are an integral part of daily life. Hence, a vital aspect of study at any higher education is the opportunity to work as part of a group or team. Students' working in groups are usually encouraged because it is viewed as a highly

effective way for students' education, which is seen as extremely relevant to the workplace. The use of teams to address changing environment, increase competitiveness and cope with demands for ever-improving performance, have become common in the construction industry, Information Technology, engineering amongst others (Ammeter & Dukerich, 2002; Doolen, Hacker & Van Aken, 2006). For instance, Devine, Clayton, Philips, Dunford and Melner (1999) in their research assessment of 128 US organizations establish that 48% of organizations use teams (work in groups). Whilst, the US Industrial Report (1995) stated that 82% of organizations in the US with 100 or more employees use a team structure (Group work pattern) to carryout their job responsibilities.

Undergraduate (Final year) building science degree course of the University of Johannesburg, have adopted the practice of using teams as a part of the educational structure. Hence, about 50% of the work done by students at this level of study is via group work. It adoption is to improve team skills by shifting from lecturing and individual learning to self-directed work teams and cooperative learning (Freeman, 1996). For example, Bolton (1999) in a university faculty study, found that 72% of a university faculty used group work as part of their courses. Also, Amato and Amato (2005) informed that group work is widely applied in academic teaching and has become part of the course contents of most mainstream education courses as adopted at the University of Johanesburg Department of Construction Management and Quantity Surveying. Hence, Pang (2011) argued that group learning method facilitate the development of knowledge and skills used in the real world of work.

With the increasing acceptance of teams in workplace and educational settings, there is obviously a need to pursue research into working in groups, especially the impact of team effectiveness on the students and the key determinants of satisfaction when working in groups. For instance, White and Bassford (1978) researched on the factors that predict and control group success in student work, and argued that proper identification of these factors in team experience enables educators and students to direct and manage group project work more efficiently. Whilst, Salas, Stagl, Burke & Goodwin, (2007) measured the effectiveness at both the team and individual levels. The major focus on team work research has been on evaluating task performance of the group. Far less attention has been paid to individual member satisfaction with the team (Olivera & Straus, 2004; Pang, 2011)

Working with peers enables students to pool ideas, perceive problems from different viewpoints and benefit from analysing, discussing and exploring their own ideas and questions and to gain feedback from their peers. Without denying the significance of traditional lectures and instructor-led discussions in undergraduate education, an increasing number of higher education teachers are recognizing the value of also assigning collaborative work to their students (Davis, 1999). Davis (1999) further informs that group work, when used both in and out of class, can be an important supplement to lectures which helps students' to master concepts and apply them to situations calling for complex applications of critical thinking skills. For instance, in the Award-Winning Teachers on Teaching Series entitled "Let Them Do It Themselves—In Groups", Professor Donald Kennedy stated that students do a great deal for one another when working in groups, thus promoting learning (Kennedy, 1999). Hence, it is important that higher education teachers tap into this by practicing a kind of catalysed learning by creating opportunities whereby collaborative learning can help to crystallize concepts to take shape (Davis, 1999; Pang, 2011).

While many higher education teachers occasionally break their classes into small informal groups to accomplish brief tasks, the kind of collaborative group work discussed here as undertaken by building science students, refers to projects/assignments that last an entire class period, several class sessions, or even an entire academic year. The groups are created by the lectures, or at times, decided upon by the students themselves. Although, there are advantages and disadvantages to each approach, but the key is that the tasks to be accomplished require interdependence so that no individual student can complete the assignment alone. This kind of system requires careful planning on the part of the teachers and it is not without difficulties for students. But the benefits can be substantial, including increased participation by students in all components of the course, better understanding amongst others. Hence, researchers have reported that regardless of the subject matter, students working in groups tend to learn more of what is taught and retain it longer than when the same content is presented in other instructional formats. This means that peers working groups provide an effective low cost substitute to individualized instruction by the teacher. Nevertheless, achieving these and other benefits, such as learning teamwork skills, do not come automatically. There are clear potential downsides to group work, including the time for organizing groups and dealing with intra-group problems, potential student resentment, more complex grading policies, and difficulties in scheduling amongst others. To achieve the purpose of group working, an instructor must carefully consider the desired educational goals and the benefits, trade-offs, and pitfalls during the course of the work.

Teaching Students to Work in Groups

Previous studies has shown that there are many elements involved in the process of introducing teaming into the classroom (Kunkel & Shafer, 1997). When these elements are not very well managed they can provide negative teamwork experiences discouraging students from continued participation in teams (Pfaff & Huddleston, 2003). Hence Krug (1997) states that negative team experiences create negative attitude toward teamwork that are transferred to the workplace.

According to Davis (1999), in a competitive academic setting, where students have most often been rewarded for individual effort, teamwork may not come naturally or easily for everyone. Despite most students have worked together informally in study groups or social organizations, they may never have considered the kinds of skills that best promote group achievement. Hence, an academic department and programmes who recommend that students should work in groups but fail to provide specific guidelines or models for successful work may find students struggling to get group projects off the ground. Even though some students will at the outset express skepticism about the value of group work, or feel that class time is best spent hearing from the instructor (who's the authority) rather than working with students who, they consider to know as little as themselves. Whereas, others may feel that they have thrived thus far on individual effort, and hence, do not want to be encumbered by other students with different histories of success or different working methods. In another stance, some other students are nervous and unfamiliar to sharing their work with their peers.

Therefore, being clear, at the outset of the class and in the course outline, about how much of the course work will involve group effort, and about why such group work will help achieve the goals of the course, will go a long way toward overcoming the negativism of some students towards working in a group (Michaelsen, Fink & Knight,

1997). It is important that course advisers inform the student on the importance of group work and the goals of group work, as students will be far more motivated to participate if they see the significance of the group assignments to the larger course objectives. Lecturers should be aware that most students have little training in guiding their peers through such activities. Hence, Bosworth (1994) states that the interactive and managerial abilities required for working in a group need to be properly stressed, so that students will be familiar with the importance of aspects such as: listening, clarifying statements, and providing good feedback; keeping discussions on task; probing assumptions and evidence; eliciting viewpoints and perspectives; mediating conflicts; and summarizing and presenting findings (Smith, 1996). Also, the roles each group members will play should be stressed, such as the, facilitator (to lead discussions), note-taker (to record and summarize progress), planner (to outline where and how the group is proceeding through the assignment), evaluator (to elicit critiques)—and provide descriptions and examples of these roles. Except group management skills are identified, and unless students are asked to reflect on their successes and difficulties with exercising these skills, few participants will see the relationship between completing the project and achieving some of the larger goals of the assignment or course (Davis, 1999; Tiberius, 1990). The time taken to examine these skills is fundamental to the success of group work (Miller, Trimbur, & Wilkes, 1994). Working in groups can prove to be very rewarding but it takes a bit of work to ensure that a group becomes an effective team.

The importance of group work When to use the

"Groups . . . hold the key to solving such societal problems as racism, sexism, and international conflict. Because groups are the building blocks of society, and any attempt to change society will succeed only if the groups within that society change" (Forsyth, 1999: 9). Different students come to University with varying amounts of experience of working in groups. Some will have done this in their previous school or college or maybe have relevant work experience. While some others may have very little experience of working in groups, especially in an education setting. People may come from different cultures and all are likely to bring unique skills and qualities to the group. Learning to use these to the best effect and ensure that everyone is contributing effectively to a joint project can be challenging. The benefits, however, can be great at the long run. Students can achieve far more by working with other students as they often learn a great deal and develop certain skills as they progress.

Group work is believed to be beneficial not only in a work environment, but also to have many positive results in academic settings (Davis, 1993). Gatfield (1999) stated that group work allows students to explore a diversity of opinions, better retain learned information, and efficiently tackle projects too large to effectively handle on an individual basis. While Thomas (2001) suggests that in certain situations, group work is linked to an increase in students' confidence levels. In a review of the educational literature on group learning, McCorkle et al. (1999) identified six benefits of group work and learning which include: comprehensiveness (allows for multifaceted projects); realism (emulates the workplace); communication skills gained by students; group skills (both interpersonal and group management); technical skills; motivation and interest (helps provide conditions for active learning. Regardless of these facts about group work, McCorkle et al. (1999), stated that there can be challenges when students work in groups. Some of the known problems when students work in groups include: social loafing by some members of groups; inadequate rewards (grading does not take into account individual as well as group efforts), which

is a major point of discourage for some students; transaction cost (greater effort to work in groups); integrative learning problems (unequal participation can occur, students may work separately and not understand what colleagues have done) and other problems, such as group work not allowing for individual innovation. Also, some students are not able to pace and structure outputs and others do not receive feedback till later in the unit of study as compared to individual work.

Despite these points of departure, group working helps students to develop generic skills such as organisation, delegation, effective communication, co-operation and leadership; all valuable qualities that will be sought after and highly valued in their careers. This is because employees look for teamwork qualities in new graduates. However, it is not sufficient to put students in groups and ask them to work together: students need to be taught the skills they will need to function successfully in this kind of situation as already discussed above.

RESEARCH METHOD

The research method can be deemed to be quantitative in nature as a self-administered questionnaire survey was conducted. The questionnaire survey led to the compilation of the primary data. The purposive sample was extracted from 55 registered students for the Bachelor of Technology in Construction Management and Quantity Surveying. This was necessitated because the research was purposely targeted the experience of the Construction Management and Quantity Surveying students with regards to their experience while working in groups. The 55 students attend lectures together, albeit, they do not attend the core discipline specific courses together. All 55 students were engaged for the primary data collection, as it was found that they all belong to one group or the other. The survey was conducted during one of the lecture sessions. The survey took about 10 minutes to complete. Two principal structured questions were asked: one aspect relating to the demography of the students and the other which elicited responses pertaining to sixteen (16) factors, related to the subject of the key determinants of satisfaction when undertaking group work. These factors were identified during the course of the literature review and not part of an existing valid survey instrument. Because the lead researcher is a staff at the department, all 55 students who were present on the day of survey responded accordingly. This equates to a response rate of 100%. Descriptive statistics in the form of response percentages and mean item scores (MIS) were therefore used for analysing the findings because of the type of questions that were asked. RAI in the mean score table stand for relative agreement index.

FINDINGS AND DISCUSSION

In line with what was stated in the previous section, the structured questions investigated the students demography and the other elicited responses pertaining to sixteen (16) factors, related to the subject of the key determinants of satisfaction when undertaking group work. The response relating to the key determinant factors assessed the extent to which the listed factors affect the student's satisfaction when undertaking group work. The impact of the factors was measured through a 5-point likert scale ranging from 1 to 5. The numbers correspond to:

1 = Strongly disagree
2 = Disagree
3 = Neutral
4 = Agree

5 = Strongly agree

With regards to the students' background information, findings form the questionnaire survey revealed that the gender distribution of the building science students was skewed towards a male dominanted profession. It was found that 65% of the students were male, while 35% were female. The finding agrees with other numerous findings which perceive the construction industry as a male dominated industry. However, the findings all revealed the increased level of participation and flow of women into the construction industry. Findings relating to the ethnic background of the students revealed 90% were Black Africans, which included the Indian and Coloured group while only 10% where while. Further findings revealed that a majority (52.5%) of the students were within the age group of 20 to 25 years, while 47.5% were above 26 years. The reason while 47.5% of the students are above 26 years in an undergraduate degree programme can be attributed to the fact that students are given the option to either grduate with a national diploma degree after their first three years of study or to continue with their studies to acquire a BTech degree. Moreover, a majority (64%) of the students were studying part-time, while 36% were only studying full time.

Table 1: Factors that affect students' satisfaction when undertaking group work

Factors	**RAI**	**Ranking**
Attitude (Students need to have the same attitude towards work)	4.59	1
Accountability (Mutual accountability towards the given task)	4.49	2
Rules (Ground rules to be set for the operation of the group)	4.47	3
Absenteeism (some students do not attend group meetings)	4.38	4
Communication	4.36	5
Contribution (not all students contribute to the assignment)	4.32	6
Contribution (my contribution is useful to the projects given)	4.25	6
Quality control (The team ensures that the work assigned to them meet the expected standards)	4.13	7
Conflict (Ease of conflict resolution within group members)	3.95	8
Group creation (I prefer we choose groups ourselves)	3.85	9
Some students do not respond to the group given task	3.60	10
Seclusion (some students keep to themselves when working in a group)	3.43	10
Expectation (not all students know what is expected from them in the group)	3.25	11
Support (Lecturers support us when working in groups)	3.10	12
Group creation (I prefer a lecturer to put us into groups)	3.05	13
Punctuality (all group members are punctual to group meetings)	2.45	14

The findings for the question pertaining to the evaluation of the key determinants factors that affects students' satisfaction when undertaking group work is summaried in Table 1. From the 16 evaluated factors, it was found that the primary factor that determines students' satisfaction toward group work is the attitude of other students. The responses recorded for this question shows an MIS of 4.59 (Table 1). This therefore suggests that the internal state that influences an individual's choice of personal action or a response tendency is vital to the projection of the reasoning

behind group work. Also, Table 1 revealed that accountability (mutual accountability towards the given task) was ranked second as a key factor that determines students' satisfaction when working in groups, with an MIS score of 4.49. This was followed by the availability of rules (ground rules to be set for the operation of the group) with an MIS score of 4.47. This factor is pereceived as a factor which will make the group work successful. A definition of what appropriate behaviour is for group members will go a long way to avoiding embarrassing or difficult situations and thereby encourage active participation in the group (Fisher & Ellis, 1990). Therefore, setting of ground rules is important in group work as revealed by the finding. The least factors that determines students satisfaction when undertaking group work as shown on the table are: group creation (I prefer a lecturer to put us into groups) with an MIS score of 3.05 and punctuality (all group members are punctual to group meetings) with MIS of 2.45.

The findings of this particular study reinforced the perceptions expressed by other researchers as conducted by previous research findings. For instance, Gardner and Korth (1998) described attitude towards teamwork as the individual willingness (internal state) to continue working together with the same team as well as in other teams (personal action). This is a vital factor toward the success of group work. There are few studies about students' attitudes toward teamwork, and findings from these studies show contradictory results. For instance, Gardner and Korth (1998), and Scaraffioti and Klein (1994) in their study with graduate students and engineering employees respectively found that even though the results were not statistically significant, individuals' attitude changed positively after their participation in teams. By contrast, Porter (1993), McCorkle et al. (1999) and Buckmaster (1994) found that students that participated in their studies were frustrated by the teamwork experiences. Although students recognized that the experience improved their interpersonal skills, they still preferred to work individually.

Also, the current findings concurs with the work of Adams et al. (2002), where seven constructs were identified as characteristics that needed to be present during the team process for it to be effective. The seven constructs are productive conflict resolution, mature communication, accountable interdependence, clearly defined goals, common purpose, role clarity and psychological safety. For instance, conflict resolution which was also considered as a key determinants by the students, is refered to by Capozzoli (1995) as the procedure and actions taken when a conflict occurs that lead to results such as facilitating the solution of the problem, increasing the cohesiveness among team members, exploring alternative positions, increasing the involvements of everyone affected by the conflict and enhancing the decision-making process (Capozzoli, 1995). According to Hoover (2002) constructive conflicts enhanced the quality of decision making and Fisher & Ellis (1990) adds on by saying conflicts should not be avoided in group work because when avoided they can create more problems. Conflicts are healthy in group work when well managed (Fisher & Ellis, 1990). Team work helps the individual develop a variety of strategies to deal with potential or actual conflict between team members (Burke & Barron, 2011).

Also, the findings agree with the work of McGregor (1960) with regards to the communication aspect, where it was stated that team members ensures their voices are heard in a team. Each team member is important in a team as the next member; which is what make teams to exist. A team is like a human body, each body part has its own function. If one body part does not function the whole body suffers. No matter how despised or small the function of that specific body part, its non-performance affects

the whole body. Also, Mohrman et al. (1995) state that teams are self-managing individuals meaning they must commit themselves to producing a quality product which was reflected in the ranking accorded the factor of absenteeism. This is because group meetings are essential to share information and to make important decisions collaboratively and they must start at an agreed time as specified on the ground (Summer & Smith, 2010). Thus absenteeism will lead to frustration for other group members. Results from the research also show that students are not punctual to group meetings or they do not come at all, which was also a source of dissatisfaction for students. This suggests that some students do not take group work seriously, which is a sign of future performance when in the workplace. However, Hoover (2002) states that participation in a given team is personally rewarding because of the social support and the learning of new skills as evident in the findings.

CONCLUSION

The purpose of the current study is to outline the key determinant factors of satisfaction to students when undertaking group work. The findings from the questionnaire survey were ranked using a mean item score rating. All factors were considered relevant by the students as evident form the findings. It is however notable that six of the listed factors are highly rated more than the others based on the recorded mean item scores as shown on Table 1. The survey findings suggest that the students rated the attitudes of other students toward group works as the core determinant factor amongst others. However, there appear to be a need to place greater emphasis in certain areas that include expectation, because not all students know what is expected from them in the group, support form lecturers, group creation and punctuality. Given the limitations of the research with regards to the survey sample, wholesome generationalisation of the findings is not advised. However, the findings provide a platform to further understand the factors that gives students satisfaction when undertaking group work.

REFERENCES

Adams, S., Simon, L. and Ruiz, B. (2002). A pilot study of the performance of student teams in engineering education. Proceedings of the American Society for Engineering Education Annual Conference and Exposition, Montreal, June.

Alexander, M.W. and Stone, S.F. (1997). Student perceptions of teamwork in the classroom: an analysis by gender. Business Education Forum. 51(3), 7-10.

Ammeter, A.P. & Dukerich, J.M. (2002). Leadership, Team Building, and Team Member Characteristics in High Performance Project Teams. Engineering Management Journal. 14(4), 3-10.

Bolton, M.K. (1999). The role of coaching in student teams: A "just-in-time" approach to learning. Journal of Management Education. 23(3), 233.-250.

Bosworth, K. (1994). Developing Collaborative Skills in College Students. In K. Bosworth and S. Hamilton (Eds.), Collaborative Learning: Underlying Processes and Effective Techniques. San Francisco: Jossey-Bass.

Buckmaster, L. (1994). Effects of activities that promote cooperation among seventh graders in a future problem solving classroom. Elementary School Journal. 95(1), 49-62.

Burke, R. & Barron, S. (2007) Project Management leadership building creative teams. Cape Town: Burke Publishing.

Capozzoli, T.K. (1995). Resolving conflicts within teams. The Journal for Quality and Participation. 18(7), 28-31.

Cohen, S. and Bailey, D. (1997). What makes teams work: group effectiveness research from the shop floor to the executive suite. Journal of Management. 23(3), 239-90.

Davis, B. G. (1999). Cooperative Learning: Students Working in Small Groups. Stanford University Newsletter on Teaching. 10(2), 1-4.

Davis, B. (1993). Tools for Teaching. San Francisco: Jossey Bass.

Devine, D., Clayton, L., Philips, J., Dunford, B. and Melner, S. (1999). Teams in organizations: prevalence, characteristics, and effectiveness. Small Group Research. 30(6), 678-711.

Doolen, T.L., Hacker, M.E. & Van Aken, E. (2006). Managing organizational context for engineering team effectiveness. Team Performance Management. 12(5/6), 138-154.

Freeman, K.A. (1996). Attitudes toward work in project groups as predictors of academic performance. Small group research. 27(2), 265-282.

Fisher, B.A. & Ellis D.G. (1990). Small group decision making. USA: McGraw-Hill Company

Forsyth, D.R. (1999). Group dynamics. (3rd Ed). Belmont, CA: Wadsworth Publishing Company.

Gardner, B.S., & Korth, S.J. (1998). A framework for learning to work in teams. Journal of Education for Business. 74(1), 28-33.

Hoover, J.D. (2002). Effective small group and team communication. USA: Earl Mcpeek.

Johnson, S. (2011). Making teamwork work: Decreasing conflicts in Teams. Orange Journal. 7(1), 1-14

Kennedy, D. (1999). Let Them Do It Themselves—In Groups. UK: Center for Teaching and Learning videotape.

Krug, J. (1997), Teamwork: why some people don't like it. Journal of Management in Engineering. 13(2), 15-16.

Kunkel, J.G. & Shafer, W.E. (1997). Effects of Student Team Learning in Undergraduate Auditing Courses. Journal of Education for Business. 72(4), 197-200.

McCorkle, D., Reardon, J., Alexander, J., Kling, N., Harris, R. and Iyer, V. (1999). Undergraduate marketing students, group projects, and teamwork: the good, the bad, and the ugly. Journal of Marketing Education. 21(2), 106-17.

McGregor, D. (1960). Human side of enterprise. New York: McGraw-Hill

McLeod, A. (2006). Me, Myself and my team revised edition. UK: Crown house Publishing Company

Michaelsen, L, Fink, D., and Knight, A. (1997). Designing Effective Group Activities: Lessons for Classroom Teaching and Faculty Development. In D. DeZure (Ed.) To Improve the Academy. Stillwater, OK: POD Network.

Miller, J., Trimbur, J., and Wilkes, J. (1994). Group Dynamics: Understanding Group Success and Failure in Collaborative Learning. In K. Bosworth and S. Hamilton (Eds.), Collaborative Learning: Underlying Processes and Effective Techniques. San Francisco: Jossey-Bass.

Mohrman, S.A. Cohen, S.G. & Mohrman A.M. (1995). Designing team based organizations. San Francisco: Jossey-Bass Publishers

Olivera, F. & Straus, S.G. (2004). Group-To-Individual Transfer of Learning: Cognitive and Social Factors. Small Group Research. 35(4), 440-465.

Pang, E. (2011). Key Determinants of Student Satisfaction When Undertaking Group Work. American Journal of Business Education. 4(10), 93-104.

Pfaff, E. and Huddleston, P. (2003). Does it matter if I hate teamwork? What impacts student attitudes toward teamwork. Journal of Marketing Education. 25(1), 37-45.

Porter, G. (1993). Are we teaching people not to work in teams: reflections on the team based assignments in the college classroom. CSWT Proceedings. Retrieved from: www.workteams.unt.edu/proceed/porter.htm

Salas, E., Stagl, K.C., Burke, C.S. & Goodwin, G.F. (2007). Fostering Team Effectiveness in Organizations: Toward an Integrative Theoretical Framework. Nebraska Symposium on Motivation. 52, 185-243.

Scaraffioti, J. and Klein, J. (1994). Effects of cooperative learning strategies on performance, attitude and group behaviors in a technical environment. Paper presented at the Annual Meeting of the American Educational Research Association. (ERIC Document Reproduction Service No. ED 378 192).

Smith, K. (1996). Cooperative Learning: Making 'Groupwork' Work. In T. Sutherland and C. Bonwell, Using Active Learning in College Classes: A Range of Options for Faculty. San Francisco: Jossey-Bass.

Summer, J. & Smith, B. (2010). Communication skills handbook. Australia: John Wiley & Sons Ltd

Thomas, M. (2001). Group project work in biotechnology and its impact on key skills. Journal of biological education. 35(2), 133-150.

Tiberius, R. (1990). Small Group Teaching: A Trouble-Shooting Guide. Ontario: OISE, 1990.

Ulloa, B.C. & Adams, S.G. (2004). Attitude towards teamwork and effective teaming. Team performance management. 10(7/8), 145-151.

White, H.C. & Bassford, G. (1978). Industrial Effectiveness: Leadership Style and Small Groups, Industrial Management, 68, 277-88.